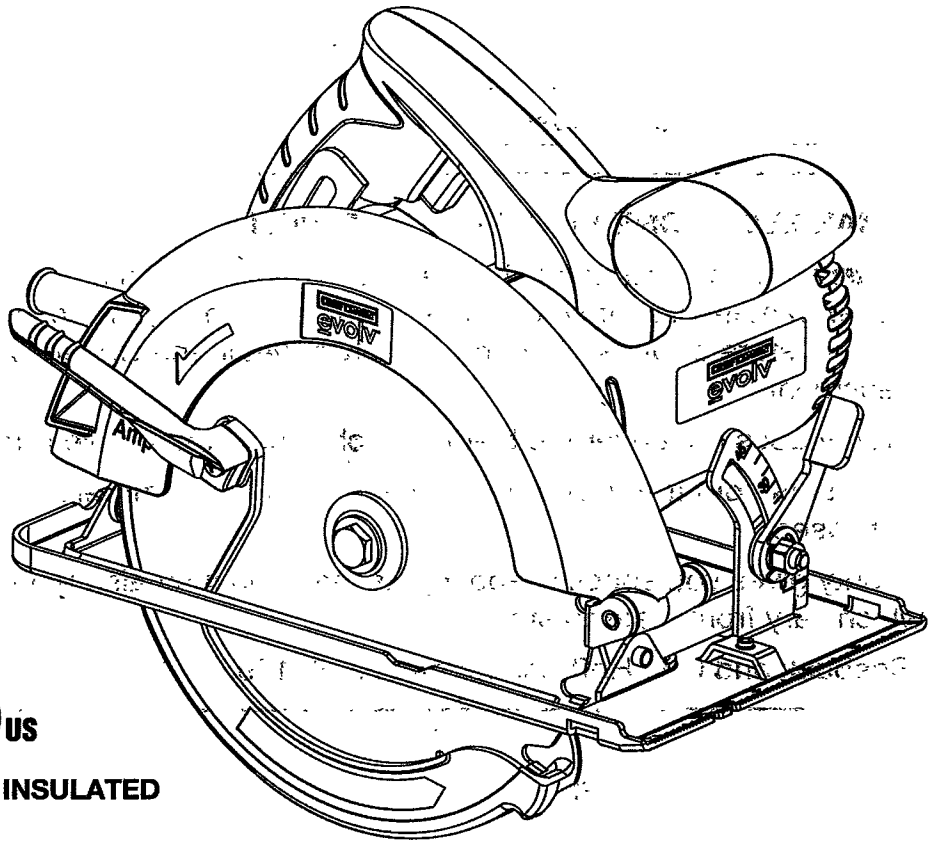
Operator's Manual

CRAFTSMAN®

evolv™

12 Amps 7-1/4-in. Compact Circular Saw

Model No. 320.18780



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DOUBLE INSULATED

⚠ **CAUTION** Read, understand and follow all Safety Rules and Operating Instructions in this Manual before using this product.

- WARRANTY
- SAFETY
- UNPACKING
- ASSEMBLY
- DESCRIPTION
- OPERATION
- MAINTENANCE
- TROUBLESHOOTING

Sears Brands Management Corporation

Visit our Craftsman website: www.craftsman.com

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CRAFTSMAN EVOLV ONE YEAR FULL WARRANTY

If this Craftsman Evolv product fails due to a manufacturer's defect in material or workmanship within one year from the date of purchase, return it to any Sears store or other Craftsman Evolv outlet in the United States for free replacement.

This warranty does not cover the blade, which is an expendable part.

This warranty is void if this product is ever used for commercial or rental purposes.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Sears, Roebuck and Co., Hoffman Estates, IL 60179

SAVE THESE INSTRUCTIONS!

READ ALL INSTRUCTIONS!

⚠ **WARNING:** Some dust created by using power tools contains chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.

SAFETY SYMBOLS

The purpose of safety symbols is to attract your attention to possible dangers.

The safety symbols, and the explanations with them, deserve your careful attention and understanding. The symbol warnings DO NOT, by themselves, eliminate any danger. The instructions and warning they give are no substitutes for proper accident prevention measures.

⚠ **WARNING:** Be sure to read and understand all safety instructions in this manual, including all safety alert symbols such as "**DANGER,**" "**WARNING,**" and "**CAUTION,**" before using this tool. Failure to following all instructions listed below may result in electric shock, fire and/or serious personal injury.

SYMBOL MEANING

⚠ **SAFETY ALERT SYMBOL:** Indicates **DANGER, WARNING,** OR **CAUTION.** May be used in conjunction with other symbols or pictographs.

⚠ **DANGER:** Failure to obey this safety warning will result in death or serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.

⚠ **WARNING:** Failure to obey this safety warning can result in death or serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.

⚠ **CAUTION:** Failure to obey this safety warning may result in personal injury to yourself or others or property damage. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.

DAMAGE PREVENTION AND INFORMATION MESSAGES

These inform user of important information and/or instructions that could lead to equipment or other property damage if not followed. Each message is preceded by the word "**NOTE**" as in the example below:

NOTE: Equipment and/or property damage may result if these instructions are not followed.

⚠ **WARNING:** The operation of any power tools can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, always wear safety goggles or safety glasses with side shield and a full-face shield when needed. We recommend a Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shield, available at Sears Stores or other Craftsman outlets. Always use eye protection that is marked to comply with ANSI Z87.1

SAFETY INSTRUCTIONS

GENERAL POWER TOOL SAFETY WARNINGS

⚠ **WARNING:** Be sure to read and understand all instructions in this manual before using the circular saw. Failure to follow all instructions may result in hazardous radiation exposure, electric shock, fire, and/or serious personal injury.

⚠ **WARNING:** Do not attempt to operate this tool until you have thoroughly read all instructions, safety rules, and warnings. Failure to comply with them can result in fire, electric shock, or serious personal injury. Save the manual and refer to it frequently.

SAVE THESE INSTRUCTIONS

GENERAL SAFETY PRECAUTIONS

WORK AREA SAFETY

- **Keep your work area clean and well lit.** Cluttered workbenches and dark areas invite accidents.
- **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.
- **Keep bystanders, children and visitors away while operating a power tool.** Distractions can cause you to lose control.
- **Make your workshop childproof** with padlocks and master switches. Lock tools away when not in use.
- **Make sure the work area has ample lighting** so you can see the work and there are no obstructions that will interfere with safe operation before using your tool.

PERSONAL SAFETY

- **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.
- **Avoid accidental starting. Be sure switch is off before plugging in.** Carrying tools with your finger on the switch or plugging in tools that have the switch in the "ON" position invites accidents.
- **Remove adjusting keys or switches before turning the tool on.** A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.

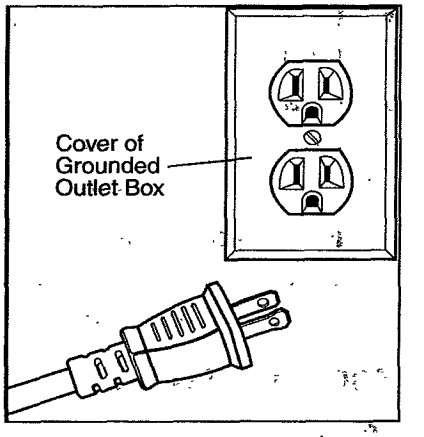
- **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations.
- **Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.
- **Know your power tool.** Read this operator's manual carefully. Learn the saw's applications and limitations, as well as the specific potential hazards related to this tool.

TOOL USE AND CARE

⚠ **WARNING:** Be sure to read and understand all instructions before operating this router. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.

- **Use clamps or other practical ways to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to loss of control.
- **Do not force the tool. Use the correct tool and bit for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
- **Do not use the tool if switch does not turn it on" or off.** Any tool that cannot be controlled with the switch is dangerous and must be repaired.
- **Disconnect plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
- **Store idle tools out of the reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
- **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools with sharp cutting edges are less likely to bind and are easier to control.
- **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tools operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.
- **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool may become hazardous when used on another tool.
- **Never leave the tool running.** Always turn it off. Do not leave the tool until it comes to a complete stop.

ELECTRICAL SAFETY



- **Double insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way.** Double insulation ⧈ eliminates the need for the three-wire grounded power cord and grounded power supply system. This circular saw is a double insulated tool.
- **Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is grounded.
- **Do not expose power tools to rain or wet conditions or use power tools in wet or damp locations.** Water entering a power tool will increase the risk of electric shock.
- **Do not abuse the cord. Never use the cord to carry the tools or pull the plug from the outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately.** Damaged cords increase the risk of electric shock.
- **When operating a power tool outside, use an outdoor extension cord marked "W-A" or" W."** These cords are rated for outdoor use and reduce the risk of electric shock.
- Replace damaged cords immediately. Using a damaged cord can cause shock, burn or electrocution.
- If an extension cord is required, use a cord with the proper size of conductor to prevent excessive voltage drop, loss of power, or overheating. The following table shows the correct size to use, depending on cord length and the nameplate amperage rating of the tool. When in doubt, use the next heavier gauge. Always use UL and CSA listed extension cords.

Recommended sizes of extension cords

Ampere Rating		Volts	Tatal Length of Cord Feet			
		120V	25ft	50ft	100ft	150ft
More Than	Not More Than	AWG				
0	6		18	16	16	14
6	10		18	16	14	12
10	12		16	16	14	12
12	16		14	12	Not Recommended	

- **Before connecting the tool** to a power source (receptacle, outlet, etc.), be sure that the voltage supplied is the same as that specified on the nameplate of the tool. A power source with voltage greater than that specified for the tool can result in serious injury to the user, as well as damage to the tool.

SAFETY SYMBOLS FOR YOUR TOOL

The label on your tool may include the following symbols.

V	Volts
A	Amps
Hz	Hertz
W	Watts
min	Minutes
~	Alternating current
⎓	Direct current
n_o	No-load speed
⧈	Class II construction, DoubleInsulated
.../min	Revolutions or Strokes per minute
⚠	Indicates danger, warning or caution. It meansattention! Your safety is involved.

SERVICE SAFETY

- **If any part of this saw is missing or should break, bend, or fail in any way;** or should any electrical component fail to perform properly: shut off the power switch and remove the saw plug from the power source and have the missing, damaged or failed parts replaced before resuming operation.
- **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
- **When servicing a tool, use only identical replacement parts. Follow instructions in the maintenance instructions of this manual.** Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

SPECIFIC SAFETY RULES FOR CIRCULAR SAW

⚠ **WARNING:** Keep hands away from cutting area and blade. Keep your second hand on the auxiliary handle or motor housing. If both hands are holding the saw, the blade cannot cut them.

⚠ **CAUTION:** Blades coast after saw is switched off.

- **Keep your body positioned to either side of the saw blade and not in direct line with the saw blade.** Kickback could cause the saw to jump backwards.

- **Do not reach underneath the work.** The guard cannot protect you from the blade beneath the workpiece.

⚠ **DANGER:** When sawing through a workpiece, the lower blade guard does not cover the blade on the underside of the workpiece. Always keep your hands and fingers away from the cutting area.

- **Check the lower guard for proper closing before each use.** Do not operate the saw if the lower guard does not move freely and close instantly. Never clamp or tie the lower guard in the open position. If the saw is accidentally dropped, the lower guard may be bent. Raise the lower guard with the retracting lever. The guard is operating properly when it moves freely, does not touch the blade or any other part in all angles and depths of cut, and readily returns to the closed position.
- **Check the operation and condition of the lower guard spring. If the guard and the spring are not operating properly, they must be serviced before use.** The lower guard may operate sluggishly, due to damaged parts, gummy deposits, or a buildup of debris. Do not operate your saw until the damage has been repaired or replaced.
- **The lower guard should be retracted manually only for making special cuts,** such as pocket or compound cuts. Always raise the lower guard by retracting its lever. As soon as the blade enters the material, the lower guard must be released. For all other sawing, the lower guard should operate automatically.
- **Always make sure that the lower guard is covering the blade before placing the saw down on a work bench or floor.** An unprotected moving blade will cause the saw to walk backwards, cutting whatever is in its path. Make note of the time it takes for the blade to stop spinning after the switch is released.
- **Never hold the piece being cut in your hands or across your legs.** It is important to support the workpiece properly in order to minimize body exposure, blade binding, or loss of control.
- **Hold tool by insulated gripping surfaces (handles) when performing an operation where the cutting tool may contact hidden wiring or its own cord.** Contact with a "live" wire will make the exposed metal parts of the tool "live" and shock the operator.
- **Always clamp the workpiece** securely so it will not move when making the cut.
- **When ripping, always use a rip fence or straight edge guide.** This improves the accuracy of the cut and reduces the chance of the blade binding.
- **Always use blades that have the correct size and shape (diamond vs. round) arbor holes.** Blades that do not match the mounting hardware of the saw will run erratically and cause loss of control.

- **Never use damaged or incorrect blade washers or bolts.** The blade washers and bolts were specially designed for your saw for optimum performance and safety of operation.
- **Never cut more than one piece at a time.** Do not stack more than one workpiece on the worktable at a time.
- **Avoid awkward operations** and hand positions where a sudden slip could cause your hand to move into the blade.
- **Never reach** into the cutting path of the blade.

⚠ **WARNING:** Use of this product can generate dust containing chemicals known to the state of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks and cement and other masonry products.
- Arsenic and chromium, from chemically treated lumber.

Your risk from these exposures varies, depending upon how often you do this type of work. To reduce your exposure to these chemicals:

- Work in a well-ventilated area.
- Work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

Avoid prolonged contact with dust from power sanding, sawing, grinding, drilling and other construction activities. Wear protective clothing and wash exposed areas with soap and water. Allowing dust to get into your mouth, eyes or lay on the skin may promote absorption of harmful chemicals.

⚠ **WARNING:** Use of this tool can generate and/or disburse dust, which may cause serious and permanent respiratory or other injury. Always use NIOSH/ OSHA approved respiratory protection appropriate for the dust exposure. Direct particles away from face and body.

ADDITIONAL RULES FOR SAFE OPERATION

⚠ **WARNING:** Be sure to read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.

- **Know your power tool. Read this operator's manual carefully.** Learn the applications and limitations, as well as the specific potential hazards related to this tool. Following this rule will reduce the risk of electric shock, fire or serious injury.
- **Always wear safety glasses or eye shields when using this saw.** Everyday eyeglasses have only impact-resistant lenses; they are not safety glasses.
- **Protect your lungs.** Wear a face mask or dust mask if the operation is dusty.

- **Protect your hearing.** Wear appropriate personal hearing protection during use. Under some conditions noise from this product may contribute to hearing loss.
- **All visitor and bystanders must** wear the same safety equipment that the operator of the saw wears.
- **Inspect the tool cords periodically and if damaged have them repaired at your nearest Sears Service Center. Be aware of the cord location.**
- **Always check the tool for damaged parts.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine if it will operate properly and perform its intended function. Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. A guard or other part that is damaged should be properly repaired or replaced at a Sears Service Center.
- **Inspect and remove** all nails from lumber before routing.
- **Save these instructions.** Refer to them frequently and use them to instruct others who may use this tool. If someone borrows this tool, make sure they have these instructions also.

GLOSSARY OF TERMS FOR WOODWORKING

Spindle

The shaft on which a blade or cutting tool is mounted. Also called the Arbor.

Revolutions Per Minute (RPM)

The number of turns completed by a spinning object in one minute.

Saw-Blade Path

The area over, under, behind or in front of the blade, as it applies to the workpiece. That area which will be or has been cut by the blade.

Set

The distance that the saw blade tooth is bent (or set) outward from the face of the blade.

Miter Cut

A cutting operation made with the blade at any angle other than 90° to the fence.

Compound-Miter Cut

A compound miter cut is a cut made using a miter angle and a bevel angle at the same time.

Cross cut

A cutting or shaping operation made against the grain of the workpiece.

Bevel Cut

A cutting operation made with the blade at any angle other than 90°to the miter table.

Dado Cut

A non-through cut that produces a square-sided notch or trough in the workpiece (requires a special blade).

Chamfer Cut

A cut removing a wedge from a block of wood so that the end (or part of the end) is angled at other than 90°.

Ripping or Rip Cut

A cutting operation along the length of the workpiece.

Freehand Cut

Performing a cut without using a fence, miter gauge, fixture, work clamp, or other proper device to keep the workpiece from twisting or moving during the cut. Freehand cuts are dangerous and must be avoided.

Through Sawing

Any cutting operation where the blade extends completely through the thickness of the workpiece.

Non-Through Cuts

Any cutting operation where the blade does not extend completely through the thickness of the workpiece, like a dado cut.

Leading End

The end of the workpiece pushed into tool first.

Kerf

The material removed by the blade in a through cut or the slot produced by the blade in a non-through or partial cut.

Kickback

A hazard that can occur when the blade binds or stalls, throwing the workpiece back toward operator.

Workpiece or Material

The item on which the cutting operation is being done. The surfaces of a workpiece are commonly referred to as faces, ends and edges.

Gum

A sticky, sap-based residue from wood products.

Resin

A sticky, sap-based substance that has hardened.

UNPACKING

⚠ WARNING: Your saw should never be connected to the power source when you are assembling parts, making adjustments, installing or removing blades, cleaning, or when it is not in use. Disconnecting the circular saw will prevent accidental starting, which could cause serious personal injury.

The saw's cutting blade is not installed at the factory.

The blade wrench is stored on the base. The wrench is used when changing or installing a new blade.

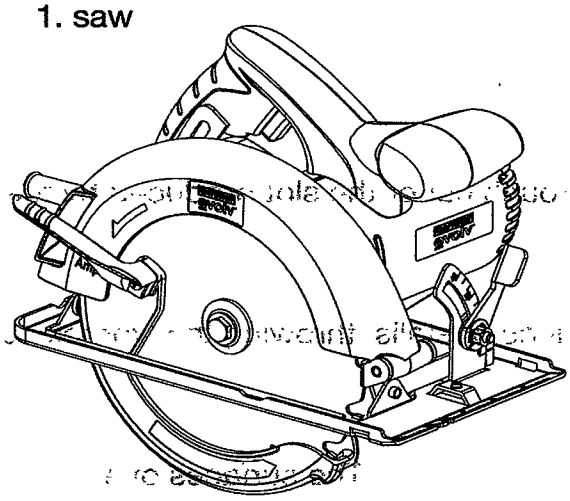
Inspect the saw carefully to make sure that no breakage or damage has occurred during shipping. If any of the items mentioned is missing, return the saw to your nearest Sears store or Craftsman Evolv outlet to have the saw replaced.

⚠ WARNING: If any part is broken or missing, do not attempt to plug in the power cord or operate saw until the broken or missing part is replaced. Failure to do so could result in possible serious injury.

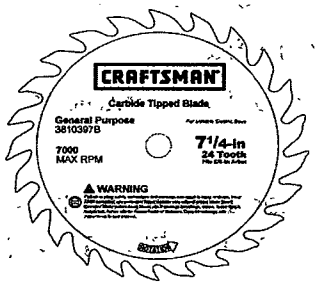
PARTS LIST (Fig. 1)

Fig. 1

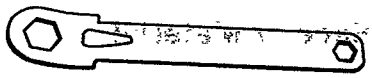
1. saw



2. blade



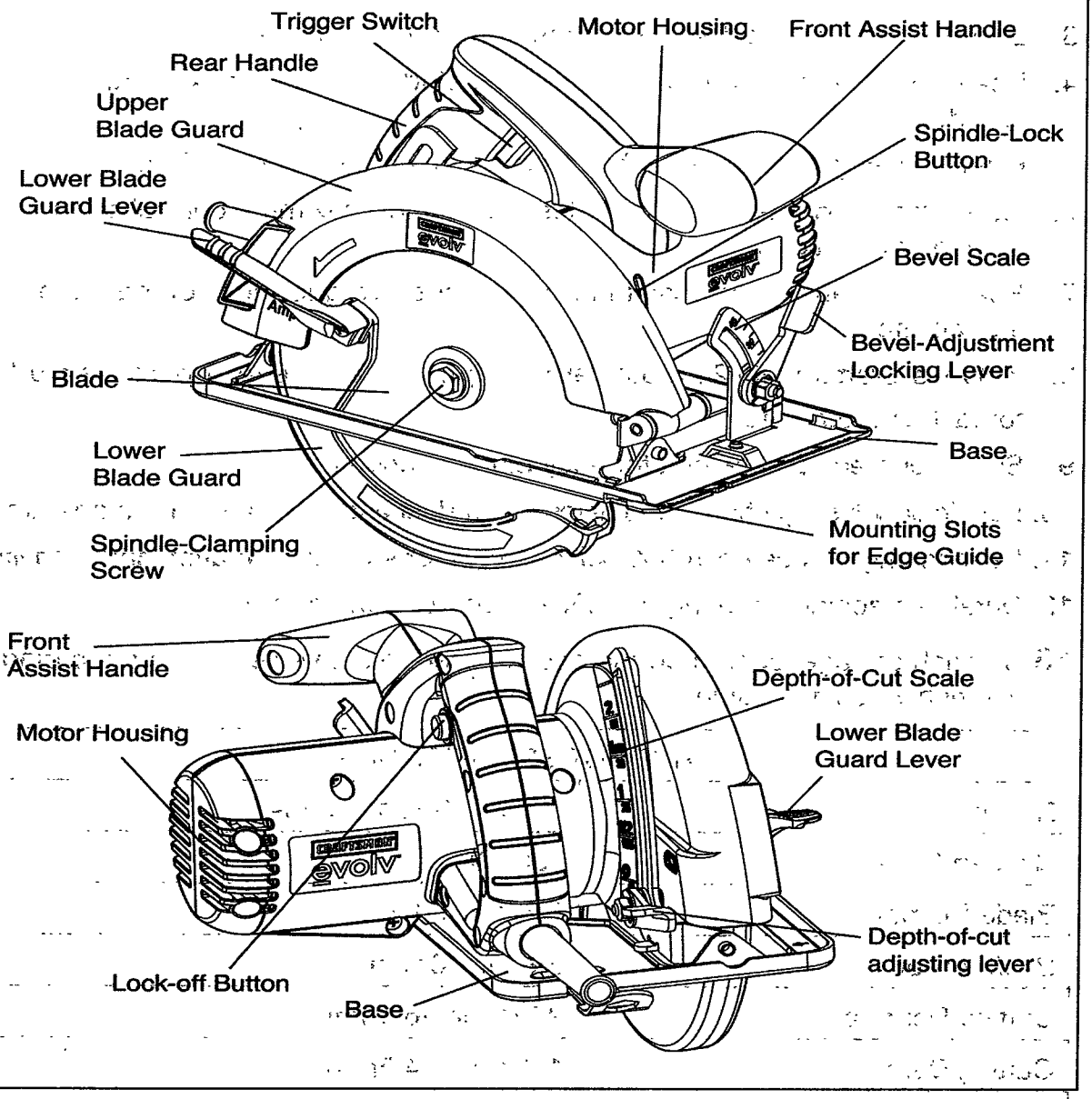
3. blade wrench



DESCRIPTION

KNOW YOUR CIRCULAR SAW (Fig. 2)

Fig. 2



NOTE: Before attempting to use your saw, familiarize yourself with all of its operating features and safety requirements.

Your circular saw has a precision-built electric motor; it should only be connected to a 120-volt, 60-Hz AC only power supply (normal household current). Do not operate on direct current (DC). This large voltage drop will cause a loss of power and the motor will overheat. If the saw does not operate when plugged into correct 120-volt, 60-Hz AC ONLY outlet, check the power supply. The saw has an 8-ft., 2-wire power cord (no adapter needed).

This Circular Saw has the following features:

1. 12 Amp, 5500 RPM (no-load speed) motor provides power and torque for fast, sure cuts in wood, plywood, hardboard, and wood-based materials.
2. Quick depth-of-cut adjustments with a maximum depth of cut: 2-7/16-in. thick at 90°; 1-3/4-in. thick at 45°
3. Easy-to-read bevel cut scale adjusts from 0° to 45° bevel capacity.
4. Heavy-duty, lightweight cast-aluminum blade guards for extra strength and durability.
5. Extended length trigger switch for maximum control and comfort.
6. Large, stamped-steel base provides stability for maximum control during sawing applications.
7. Rear handle and front-assist handle for positive grip, control, balance, and comfort.
8. Includes Craftsman® 24 tooth carbide-tipped, steel, general-purpose blade for fast, smooth cuts.
9. Side-mounted spindle lock for easy blade changes.
10. Built-in sawdust ejection chute helps direct dust and chips away from operator.
11. Permanently lubricated 100% ball bearings for smooth operation and long life.
12. Durable machined gearing for efficient power transmission.
13. Wrench storage located on the base is used to conveniently store the blade wrench when it is not in use.

PRODUCT SPECIFICATION	
Rating	120V~ 60Hz,12 Amps
No load Speed	5500RPM
Blade Diamete	7 1/4 in. (184mm)
Blade Arbor	5/8 in. (16mm)
Cutting Depth at 90°	2 7/16 in. (62mm)
Cutting Depth at 45°	1 3/4 in. (44.5mm)
Maximum Bevel Angle	45°
Tool weight	7.7 lb

⚠ WARNING: A 7-1/4-inch blade is the maximum blade capacity of your saw. A blade larger than 7-1/4 inches will come in contact with the blade guards. Never use a blade that is so thick that it prevents the outer blade washer from engaging with the flat side of the spindle. Blades that are too large or too thick can result in an accident causing serious injury.

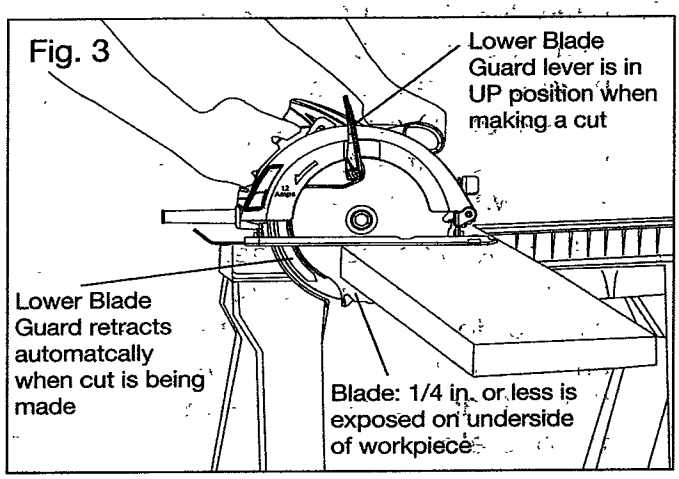
SAW BLADES

All saw blades need to be kept clean, sharp, and properly set in order to cut efficiently. Using a dull blade places a heavy load on the saw and increases the danger of kickback. Keep extra blades on hand so sharp blades are always available. Gum or wood pitch that has hardened on the blade slows the saw. Use gum and pitch remover, hot water, or kerosene to remove these substances. Do not use gasoline.

BLADE GUARD SYSTEM (Fig. 3)

The lower blade guard is there for your protection and safety. It should never be altered for any reason. If it becomes damaged or begins to return slowly, do not operate your saw until the damaged part has been repaired or replaced. Always leave the guard in its correct operating position when using the saw.

Fig. 3

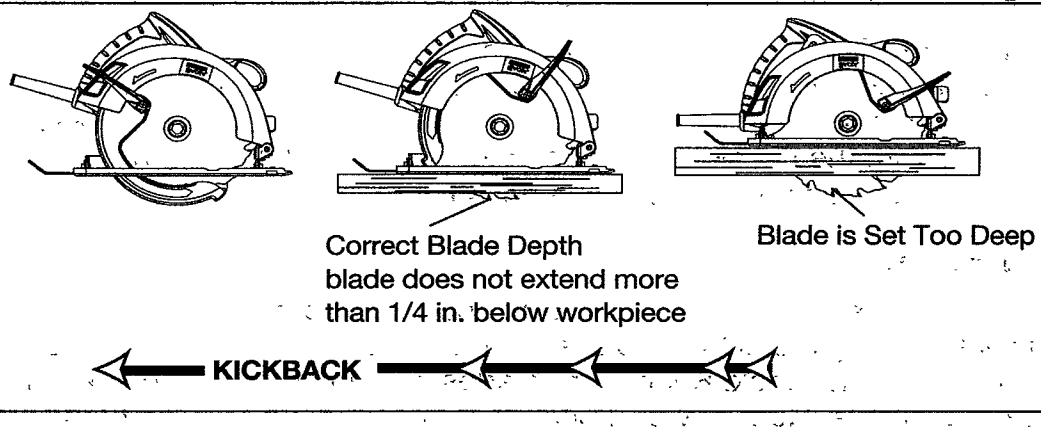

Lower Blade Guard lever is in UP position when making a cut
Lower Blade Guard retracts automatcally when cut is being made
Blade: 1/4 in. or less is exposed on underside of workpiece

⚠ CAUTION: Never use the saw when the guard is not operating properly. The guard should be checked for correct operation before each use. If you drop your saw, check the lower blade guard for damage at all depth settings before using it again.

NOTE: The guard is operating properly when it moves freely and then readily returns to the closed position. If, for any reason, the lower blade guard does not close freely, take the saw to your nearest Sears Repair Center for service before using it.

KICKBACK WHAT CAUSES IT AND WAYS TO HELP PREVENT IT (Fig. 4)

Fig. 4



The Causes of Kickback

1. Kickback is a sudden reaction to a pinched, bound, or misaligned saw blade, which causes an uncontrolled saw to lift up and out of the workpiece and toward the operator.
2. When the blade is pinched or bound tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit rapidly back towards the operator.
3. If the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the wood. This causes the blade to climb out of the kerf and jump back towards the operator.
4. Sawing into knots or nails in the workpiece can cause Kickback.
5. Sawing into wet or warped lumber can cause Kickback (Fig. 5a).

Fig. 5

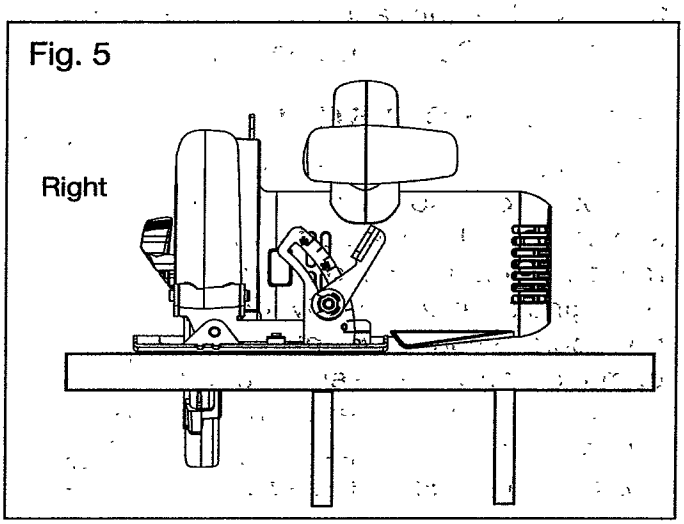
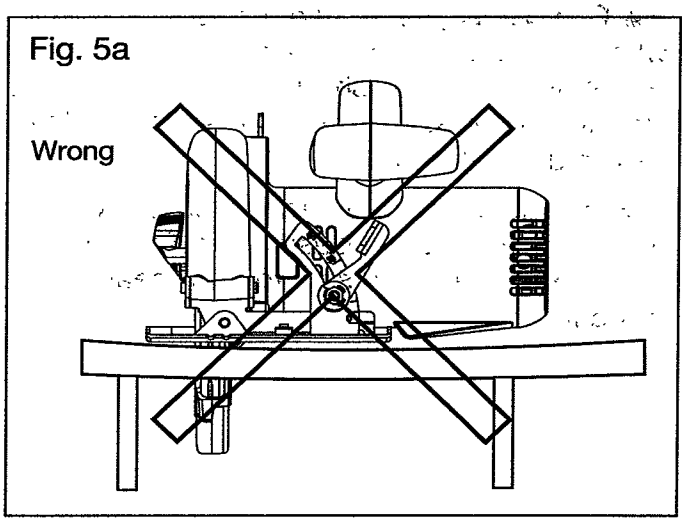


Fig. 5a



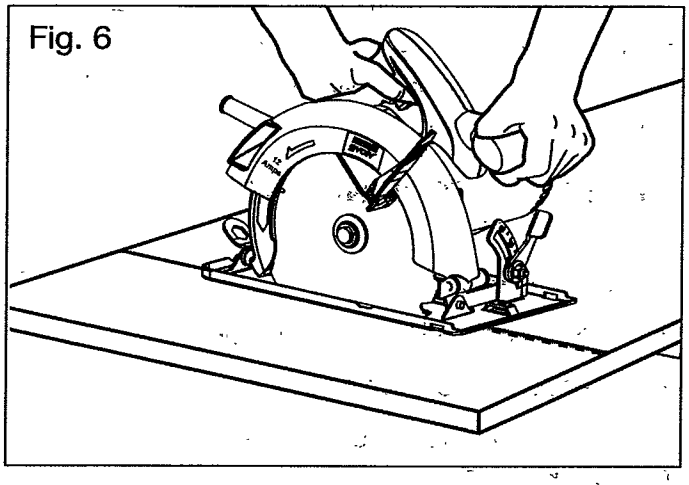
6. Forcing a cut or not supporting the workpiece correctly can cause Kickback (Fig. 5a).
7. Kickback is a result of tool misuse and/or incorrect operating procedures or conditions. It can be avoided by taking the proper precautions.

Ways to Help Prevent Kickback

⚠ **DANGER:** Always immediately release the trigger switch if the blade binds or the saw stalls. Kickback could cause you to lose control of the saw. Loss of control can lead to serious injury.

1. **Always** maintain a firm grip with both hands on the saw (Fig. 6) and position your body and arms to allow you to resist kickback forces. Kickback forces can be controlled by the operator, if the proper precautions are taken.

Fig. 6

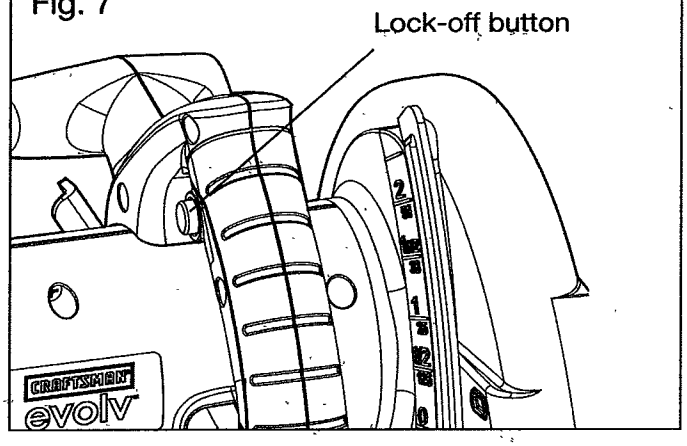


2. If the blade is binding, or when you are interrupting a cut for any reason, always release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backward while the blade is in motion or Kickback may occur. Check and take corrective action to eliminate the cause of blade binding!
3. Inspect the workpiece for knots or nails before cutting. Never saw into a knot or nail.
4. **Do not** cut warped or wet lumber (Fig. 5a).
5. **Always** support large panels to minimize the risk of blade pinching and kickback. Large panels tend to sag under their own weight (Fig. 5a). Supports must be placed under the panel: one near the line of cut and one near the edge of the panel (Fig. 5).
6. When restarting the saw in the workpiece, center the blade in the kerf and check to be sure that the saw teeth are not engaged into the material. If the saw blade is binding, it may walk up or Kickback from the workpiece when the saw is restarted.
7. **Do not** use a dull or damaged blade. Unsharpened, improperly set, or gummed-up blades produce narrow kerf which causes excessive friction, blade binding, and Kickback.
8. **Keep** the blade at the correct depth setting. The depth setting should not exceed 1/4-inch below the material being cut (Fig. 4).
9. **Be sure** that the blade-depth and bevel-adjustment locking levers are tight and secure before making a cut. If the blade adjustment shifts while cutting, it may cause binding and Kickback.
10. **Use extra caution** when making a "Pocket Cut" into existing walls or other blind areas. The protruding blade may cut objects that can cause Kickback.

LOCK-OFF BUTTON (Fig. 7)

The lock-off button reduces the possibility of accidentally starting the saw. The lock-off button is located on the handle above the trigger switch. The lock-off button must be depressed before you pull the trigger switch.

Fig. 7



STARTING/STOPPING THE SAW (Fig. 7)

To start the saw:

1. Depress the lock-off button.
2. Depress the trigger switch.

Always allow the blade to reach full speed, and then guide the saw blade into the workpiece.

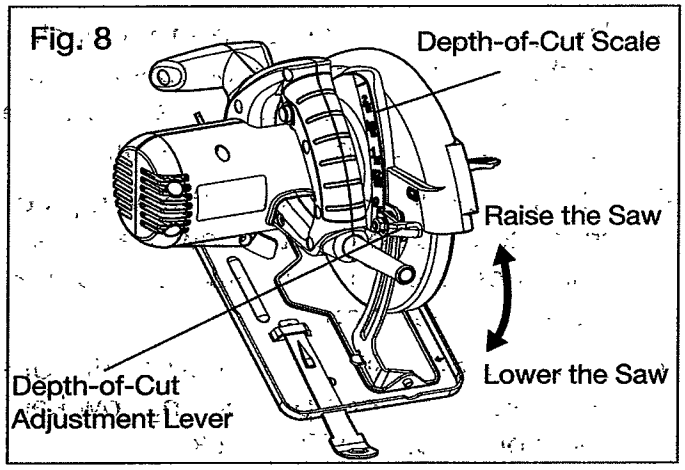
To stop the saw:

1. Release the trigger switch.
2. After you release the trigger switch, allow the blade to come to a complete stop. **Do not remove the saw from the workpiece while the blade is moving.**

MAKING DEPTH-OF-CUT ADJUSTMENTS (Fig. 8)

Always use the correct blade depth setting. The correct blade-depth setting for all cuts should not be more than 1/4-inch below the material being cut (Fig. 4). Allowing more depth will increase the chance of kickback and cause the cut to be rough. Your saw is equipped with a depth-of-cut scale for increased depth-of-cut accuracy. The depth-of-cut scale is located on the back of the upper blade guard.

Fig. 8

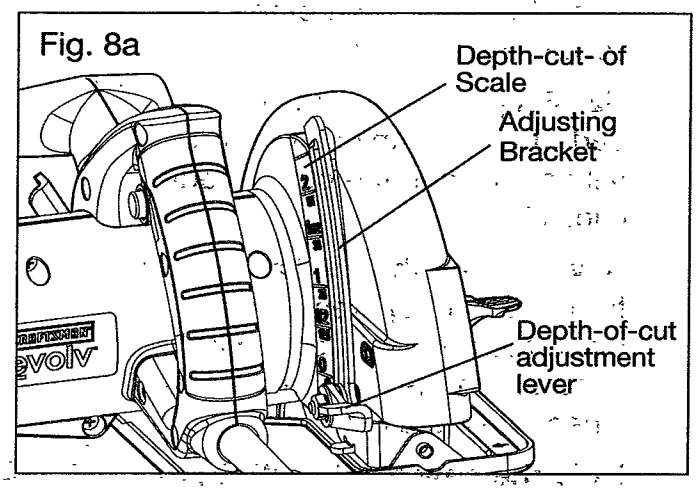


TO SET THE BLADE DEPTH (Fig. 8a)

1. Unplug the saw.

⚠ WARNING: Always unplug saw before making any adjustments. Failure to unplug the saw could result in accidental starting which can cause serious personal injury.

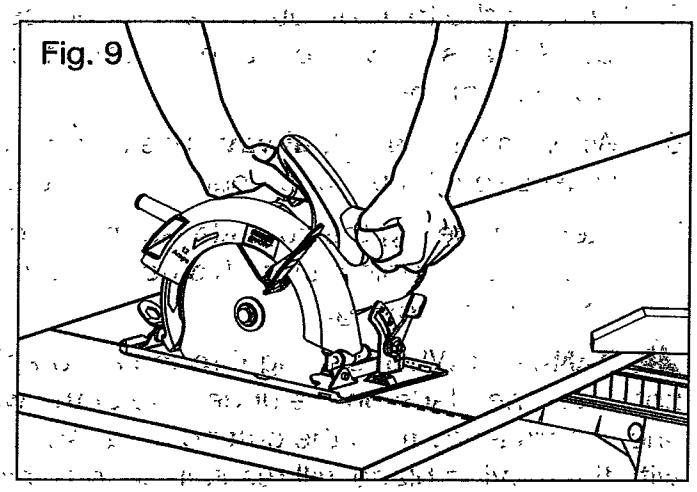
2. Raise the depth-of-cut adjustment lever to loosen the base (Fig. 8).
3. Determine the desired depth of cut.



4. Locate the depth-of-cut scale on the back of the upper blade guard (Fig. 8a).
5. Hold the base of the saw flat against the edge of the workpiece and then raise or lower the saw until the indicator mark on the bracket aligns with the desired depth-of-cut mark.
6. Tighten the depth-of-cut adjustment lever.

STARTING A CUT (Fig. 9)

⚠ WARNING: Always clamp and support the workpiece. Always maintain proper control of saw. Failure to securely clamp and support the workpiece or loss of control of the saw could result in serious injury.



Always use your saw with your hands positioned correctly: one hand operating the trigger switch and the other on the front assist handle (Fig. 9).

⚠ WARNING: Always maintain proper control of the saw to make sawing safer and easier. Loss of control of the saw could cause an accident resulting in possibly serious injury.

Never use the saw with your hands positioned as shown in Fig. 10.

Always support the workpiece near the cut.

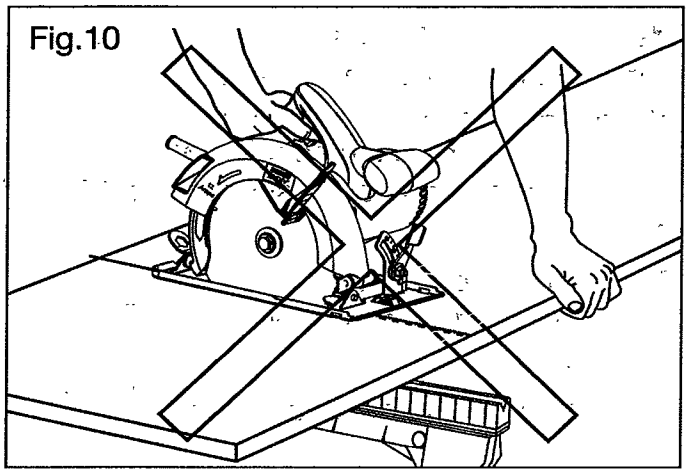
Always support the workpiece so the cut will be on your right.

Always clamp the workpiece so it will not move during the cut. Place the workpiece with the good side down.

NOTE: The good side of the workpiece is the side where appearance is important.

1. Before starting a cut, draw a guideline along the desired line of cut, then place the front edge of the saw base on that part of the workpiece that is solidly supported (Fig. 9).
2. **NEVER** place the saw on a part of the workpiece that will fall down when the cut is made (Fig. 10).
3. **Always** keep the cord away from the cutting area. Always place the cord so it does not hang up on the workpiece when making a cut.
4. **Hold the saw firmly with both hands** (Fig 10).

Fig.10



⚠ **WARNING:** If the cord hangs up on the workpiece during a cut, release the trigger switch immediately. To avoid injury, unplug the saw and move the cord to prevent it from hanging up again.

⚠ **DANGER:** Using the saw with a damaged cord could result in serious injury or death. If the cord has been damaged, have it replaced before using the saw again.

5. Depress the lock-off button and squeeze the trigger switch to start the saw. Always allow the blade to reach full speed before beginning the cut into the workpiece.
6. When making a cut, **always** use steady, even pressure. Forcing the saw causes rough cuts and could shorten the life of the saw or cause Kickback.
7. After completing the cut, release the trigger switch and allow the blade to come to a complete stop. **Do not** remove the saw from the workpiece while the blade is moving.

⚠ **DANGER:** When sawing through a workpiece, the lower blade guard does not cover the blade on the underside of the workpiece. Always keep your hands and fingers away from the cutting area. Any part of your body coming in contact with the moving blade will result in serious injury.

MAKING CROSS CUTS AND RIP CUTS (Fig. 11 and 11a)

⚠ WARNING: Always securely clamp and support the workpiece. Always maintain proper control of the saw. Failure to clamp and support the workpiece or loss of control of the saw could result in serious injury.

1. Always use your saw with your hands positioned correctly (Fig. 11).

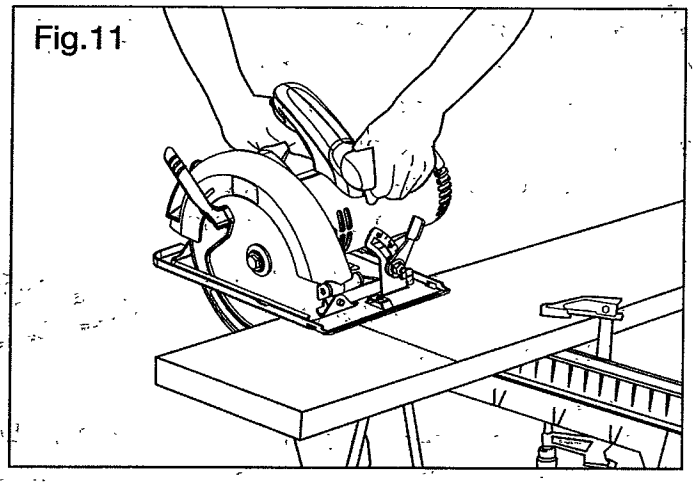
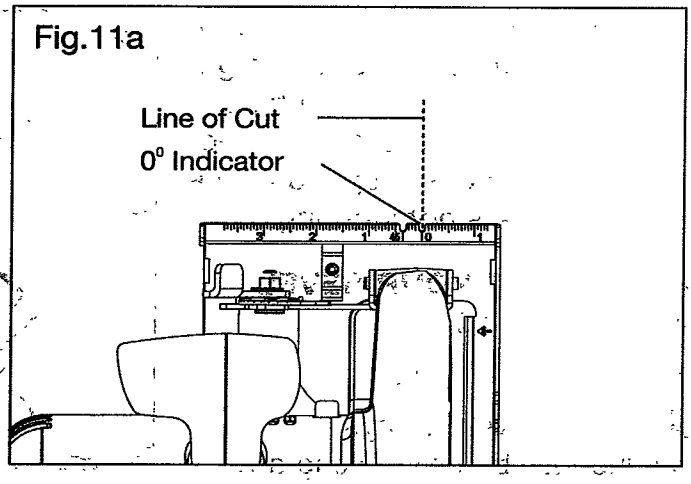


Fig.11

⚠ WARNING: Always maintain proper control of the saw to make sawing safer and easier. Loss of control of the saw could cause an accident resulting in possible serious injury.

2. When making cross or rip cuts, align the line of cut with the right side of the notch marked by the 0° indicator (Fig.11a).
3. Since blade thickness varies, make a trial cut in scrap material along a guideline to determine how much, if any, you should offset the blade from the guideline to allow for the kerf of the blade.



INTEGRATED CROSSCUT RULER

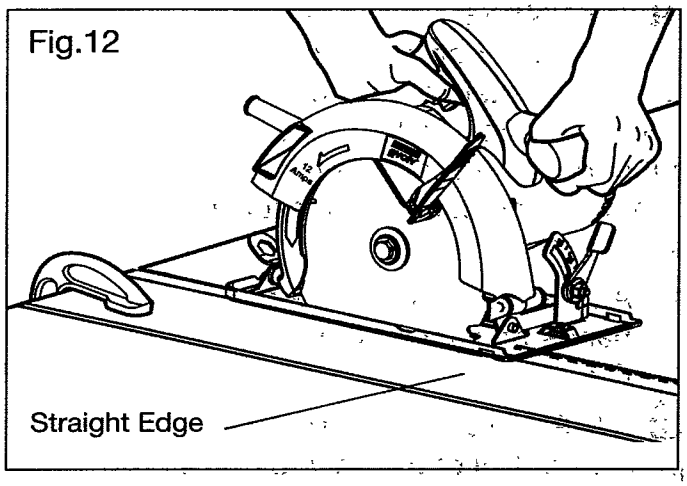
Marked on the base across the front (Fig. 11a) is a handy ruler for measuring repetitive cuts. It is marked 1-1/4 inches to the right of 0° and 3-3/4-inches to the left of 0°.

MAKING RIP CUTS

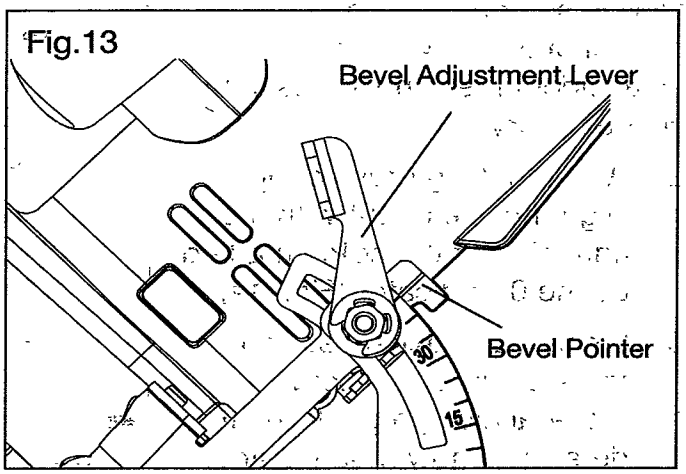
Always use straight edge when making long or wide rip cuts with your saw.

USING A STRAIGHT EDGE (Fig. 12)

⚠ WARNING: Always securely clamp and support the workpiece. Always maintain proper control of saw. Failure to clamp and support the workpiece or loss of control of the saw could result in serious injury.



1. You can make an efficient rip guide by clamping a straight edge to your workpiece.
2. Always let the blade reach full speed, and then carefully guide the saw into the workpiece.
3. Carefully guide the saw along the straight edge for a straight rip cut (Fig. 12). Do not bind the blade in the cut. Push the saw forward at a speed where the blade is not laboring.



HOW TO SET YOUR BEVEL ANGLE (Fig. 13)

1. Unplug the saw.

⚠ WARNING: Always unplug saw before making any adjustments. Failure to unplug the saw could result in accidental starting, which can cause serious personal injury.

2. Loosen the bevel-adjustment lever (Fig.13).
3. Raise the motor housing end of the saw until you reach the desired angle setting on the bevel scale.
4. Securely tighten the bevel-adjustment lever.

MAKING BEVEL CUTS (Fig. 14 and 14a)

⚠ WARNING: Always securely clamp and support the workpiece. Always maintain proper control of the saw. Failure to clamp and support the workpiece or loss of control of saw could result in serious injury.

Fig.14

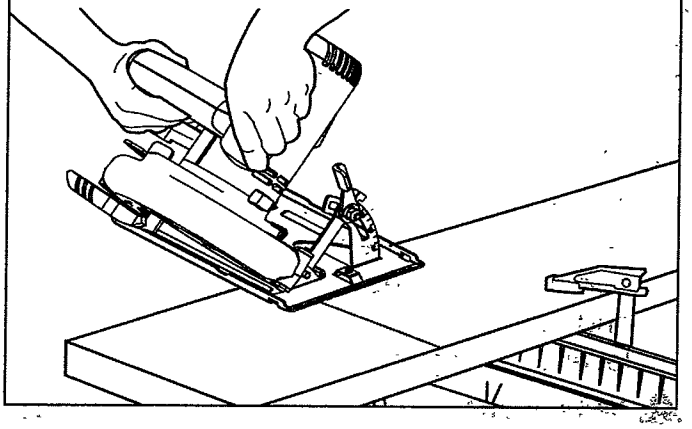
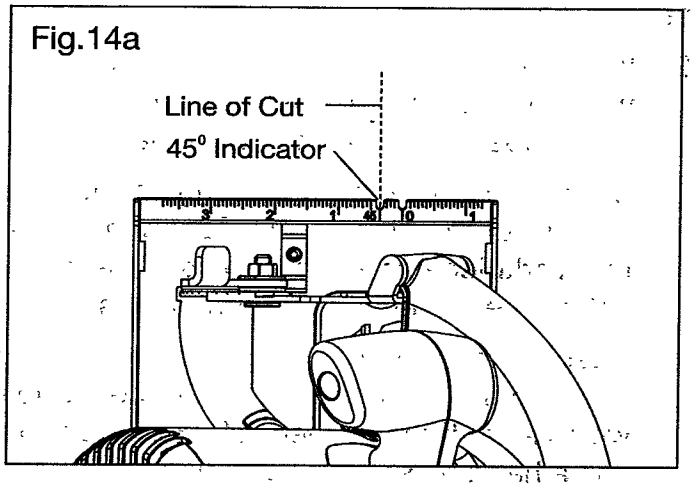


Fig.14a



1. Your saw can be adjusted to cut at any angle between 0°and 45°. When making 45° bevel cuts, the notch in the saw base will help you line up the blade with the line of cut (Fig. 14a).
2. Align your line of cut with the left side of the notch next to the 45°indicator when making 45° bevel cuts.
3. Since blade thickness varies and different angles require different settings, **make a trial cut** in scrap material along the guideline to determine how much, if any, you should offset the blade from the guideline to allow for the kerf of the blade.
4. When making a bevel cut, hold the saw firmly with both hands (Fig. 14).
5. Rest the front edge of the base on the workpiece, then depress the lock-off button and squeeze the trigger switch to start the saw. Always let the blade reach full speed, and then guide the saw into the workpiece.
6. After completing your cut, release the trigger switch and allow the blade to come to a complete stop in the cut. Do not remove the saw from the workpiece while the blade is moving. It will damage your bevel cut and cause Kickback.

⚠ WARNING: If the blade comes in contact with the workpiece before it reaches full speed, it could cause the saw to kickback towards you, possibly resulting in serious injury.

MAKING POCKET CUTS (Fig. 15)

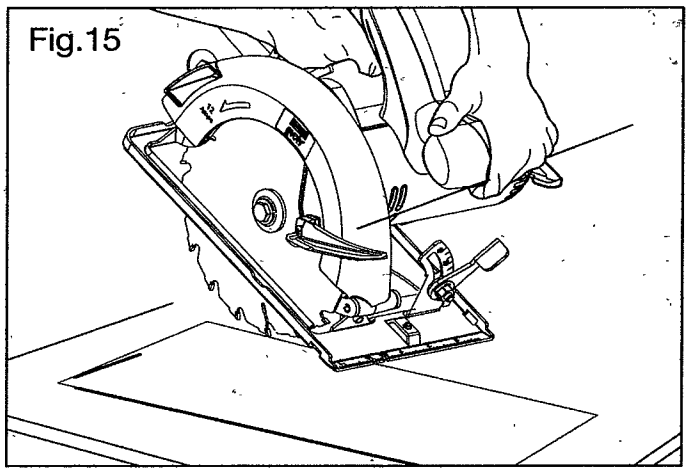


Fig.15

⚠ **WARNING:** Always adjust the bevel setting to zero before making a pocket cut. Attempting a pocket cut at any other setting can result in a loss of control of the saw, which can result in serious injury.

1. Adjust the bevel setting to zero, set the blade to the correct blade-depth setting, and use the lower blade guard lever to swing the guard up.

⚠ **WARNING:** Always raise the lower blade guard with the lever to avoid serious injury.

2. While holding the lower blade guard up by the lever, firmly rest the front of the saw base flat against the workpiece with the rear handle raised so the blade does not touch the workpiece (Fig. 15).
3. Depress the lock-off button and squeeze the trigger switch to start the saw. Always let the blade reach full speed, and then slowly lower the blade onto the workpiece until the base is flat against the workpiece. As the blade enters the material, you must release the lower blade guard lever.
4. After you complete the cut, release the trigger switch and allow the blade to come to a complete stop. After the blade has stopped, remove it from the workpiece. If the corners of your pocket cut are not completely cut through, use a hand finishing saw to finish the corners.

⚠ **WARNING:** Never tie the lower blade guard in the raised position. Leaving the blade exposed could result in serious injury.

MAINTENANCE

⚠ **WARNING:** To ensure safety and reliability, all repairs should be performed by a qualified service technician at a Sears Service Center.

⚠ **WARNING:** For your safety, always turn off the switch and unplug the circular saw from the power source before performing any maintenance or cleaning.

It has been found that electric tools are subject to accelerated wear and possible premature failure when they are used to work on fiber glass, wallboard, spackling compounds or plaster. The chips and grindings from these materials are highly abrasive to electrical tool parts, such as bearings, brushes, commutators, etc. Consequently, it is not recommended that this tool be used for extended work on any fiberglass material, wallboard, spackling compound or plaster. During any use on these materials, it is extremely important that the tool is cleaned frequently by blowing with an air jet.

⚠ **WARNING:** Always wear safety goggles or safety glasses with side shields during power tool operations, or when blowing dust. If operation is dusty, also wear a dust mask.

ROUTINE MAINTENANCE

⚠ **WARNING:** Do not at any time let brake fluid, gasoline, petroleum-based products, penetrating oils, etc. come in contact with plastic parts. Chemicals can damage, weaken or destroy plastic, which may result in serious personal injury.

Periodic maintenance allows for long life and trouble-free operation. A cleaning, lubrication and maintenance schedule should be maintained.

As a common preventive maintenance practice, follow these recommended steps:

- When work has been completed, clean the tool to allow smooth functioning of the tool over time.
- Use clean, damp cloths to wipe the tool.
- Check the state of all electrical cables.
- Keep the motor air openings free from oil, grease and sawdust or woodchips, and store tool in a dry place.
- Be certain that all moving parts are well lubricated, particularly after lengthy exposure to damp and/or dirty conditions.

CHANGING THE BLADE (Figs. 16, 16a)

⚠ WARNING: Be sure to wear protective work gloves while handling a saw blade. The blade can injure unprotected hands.

1. Unplug the saw.

⚠ WARNING: To prevent personal injury, always disconnect the plug from power source before assembling parts, making adjustments or changing blades.

2. Place the saw on its side on a flat surface.
3. Loosen the depth-of-cut adjustment lever, raise the saw up all the way relative to the base, and tighten the lever. This gives you easier access to the blade mounting area (Fig. 16a).
4. Place the saw upright, on its base and on a flat surface (Fig. 16a).
5. To loosen the spindle-clamping screw "A", depress the spindle-lock button (Fig.16). Place the blade wrench on the spindle-clamping screw "A". Move the wrench back and forth until you feel the spindle-lock button depress further, as it locks the blade in position, so the spindle-clamping screw can be removed.
6. Keeping the spindle-lock button firmly depressed, turn the spindle screw counterclockwise to loosen and remove it.
6. Raise lower blade guard using the blade-guard lever and hold it in the raised position for the remaining steps
7. Completely remove the spindle-clamping screw "A" and the outer "D" washer and the blade (Fig. 16a).
8. The remaining washer is the inner bushing washer that fits around the spindle shaft; it does not need to be removed.
9. Put a drop of oil onto the inner bushing washer and outer "D" washer where they will touch the blade.
10. Place the new saw blade inside the lower blade guard, onto the spindle shaft and against the inner bushing.

Fig.16

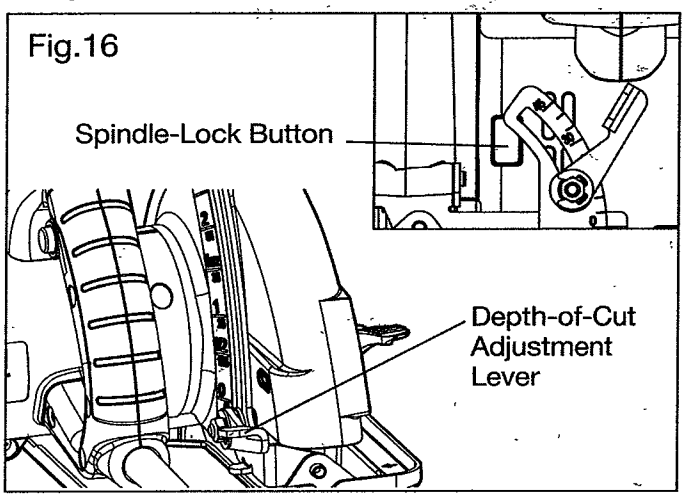
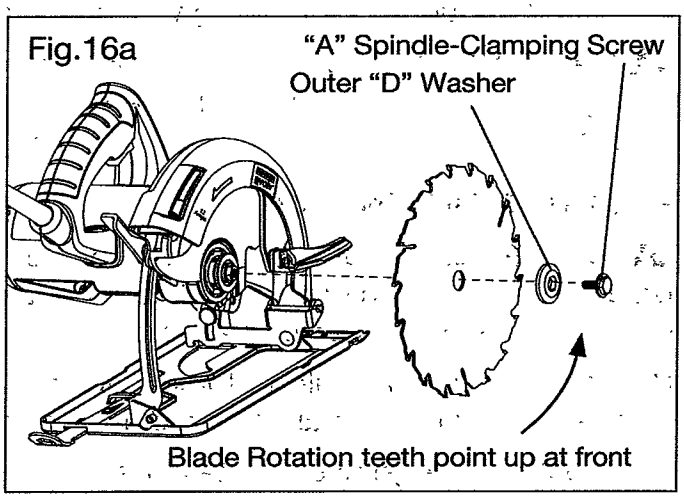


Fig.16a



NOTE: The teeth of the blade should point upward at the front of the saw as shown in (Fig. 16a).

11. Replace the "D" washer.
12. Firmly hold down spindle-lock button as you replace the spindle-clamping screw and hand tighten it in a clockwise direction. Then use the blade wrench to securely tighten the spindle-clamping screw.
13. Release the blade-guard lever to allow the lower blade guard to return to position.

LUBRICATION

All of the bearings in this tool are lubricated with a sufficient amount of high-grade lubricant for the life of the tool under normal operating conditions. Therefore, no further lubrication is required.

TROUBLESHOOTING

If the blade does not follow a straight line:

- Teeth are dull. This is caused by hitting a hard object such as a nail, and dulling the teeth on one side. The blade tends to cut to the side with the sharpest teeth.
- Base is out of line or bent.
- Blade is bent.
- Edge guide or straight edge is not being used.

If the blade binds or smokes from friction:

- Blade is dull.
- Blade is on backwards.
- Blade is bent.
- Workpiece is not properly supported.
- Incorrect blade is being used.

ACCESSORIES

WARNING: The use of attachments or accessories that are not recommended for this tool might be dangerous and could result in serious injury.

Sears and other Craftsman® outlets offer a large selection of 7-1/4 inch Craftsman steel carbide-tipped blades designed for specific cutting applications. Contractor bulk packs are also available.

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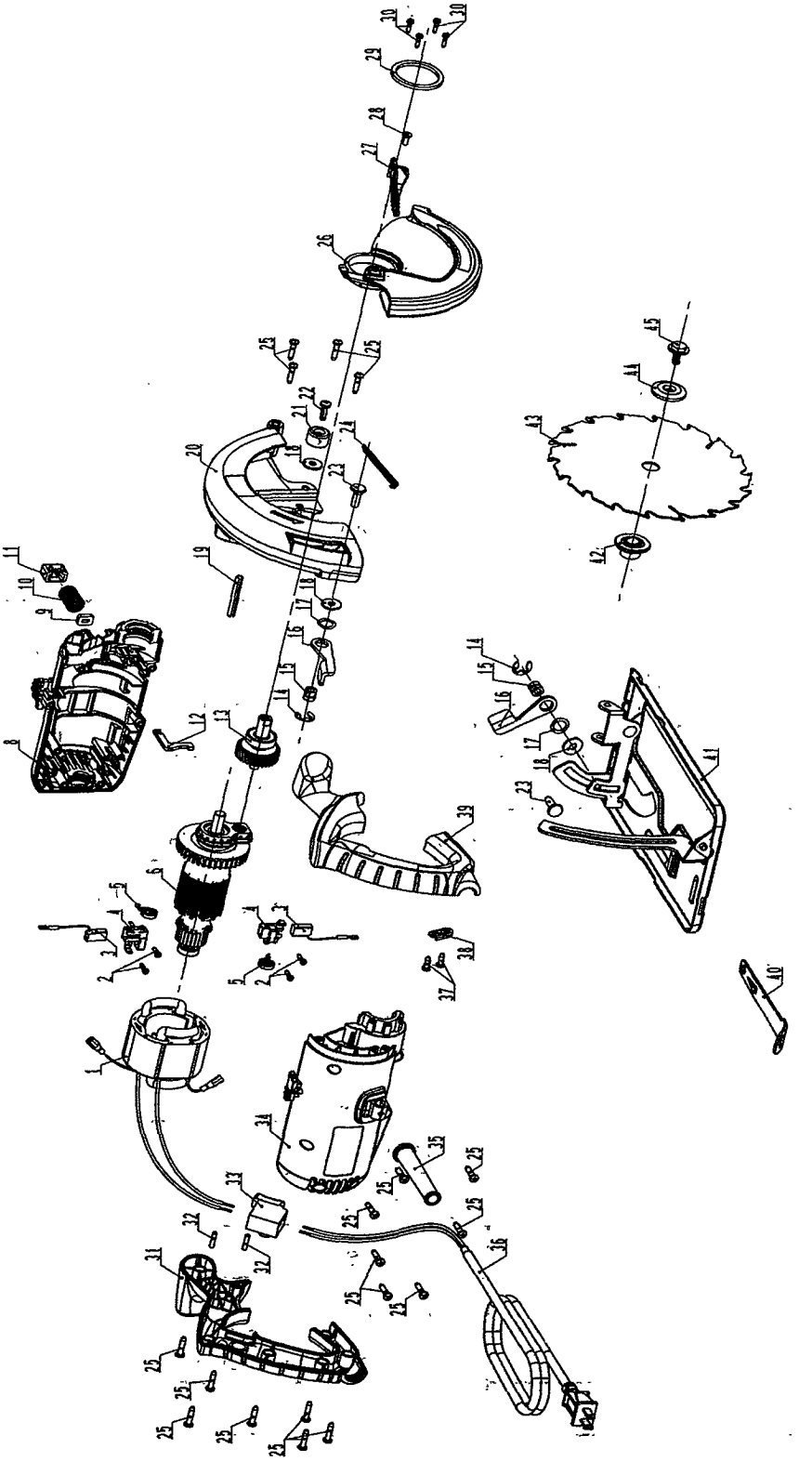
7-1/4-in. CIRCULAR SAW MODEL NUMBER 320.18780

Always mention the Model Number when ordering parts for this tool.



PARTS LIST

7 1/4-in. CIRCULAR SAW MODEL NUMBER 320.18780

Always mention the Model Number when ordering parts for this tool

No.	Part No.	Part Name		Quantity	
1	2740247002	Stator		1	
2	5610012000	Tapping Screw		4	
3	4960270000	Carbon Brush		2	
4	2800175000	Brush Support		2	
5	3660087000	Snailed Spring		2	
6	2750849002	Rotor Set	Rotor	1	1
	5700006000		Ball Bearing	1	
	3402214000		Bearing Support	1	
	5700053000		Needle Bearing	1	
8	3123418000	Left Housing		1	
9	3704010000	Felt Block		1	
10	3660326000	Spring		1	
11	3123501000	Lock Button		1	
12	3703999000	Lock Rod		1	
13	3520310000	Gear Set	Gear	1	1
	3550935000		Gear Shaft	1	
	5700014000		Ball Bearing	1	
14	5660010000	E Ring		2	
15	5630043000	Nut		2	
16	3700242000	Lever		2	
17	3700283000	Wave Washer		2	
18	5650017000	Plain Washer		3	
19	5670263000	Spring Pin		1	
20	3420629000	Gear Case		1	
21	3121051000	Stopper		1	
22	5610058000	Thread Forming Screw		1	
23	5620153000	Screw		2	

No.	Part No.	Part Name		Quantity	
24	3660079000	Spring		1	
25	5610042000	Tapping Screw		18	
26	3420628000	Lower Guard		1	
27	3121379000	Moving Guard Lever		1	
28	5620039000	Screw		1	
29	3704000000	Cover		1	
30	5620410000	Screw With Washer		4	
31	3320845000	Left Handle		1	
32	3550973000	Pendulum Pin		2	
33	4870006000	Switch		1	
34	3402386000	Right Housing		1	
35	3121050000	Cord Guard		1	
36	4810002000	Power Cord & Plug		1	
37	5610093000	Tapping Screw		2	
38	3700285000	Cord Anchorage		1	
39	3320846000	Right Handle		1	
40	3700664000	Wrench		1	
41	3703994000	Base Set	Base Plate	1	1
	3703998000		Depth Bracket	1	
	3703995000		Support	1	
	5680009000		Rivet	2	
42	3550936000	Inner Flange		1	
43	3810397000	Blade		1	
44	3550938000	Out Flange		1	
45	5620151000	Flange Screw		1	

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